

GENERAL ENVIRONMENTAL EFFECTS OF SOLID WASTES

Water Quality Effects

Impairment of surface and groundwater quality due to inadequate management practices for the storage, collection, transportation, and disposal of municipal, industrial, agricultural, and other special wastes, such as hazardous wastes, sludges, and street sweepings.

Air Quality Effects

Impairment of air quality due to uncontrolled burning of solid waste.
Impairment of air quality due to emissions from solid waste collection and transportation vehicles.

Public Health and Safety Effects

Production of flies, rodents, and other vectors of disease as a result of poorly managed solid waste.
Transmission of pathogens and parasites through sewage sludge and other hazardous waste.
Occurrence of occupational or safety hazards such as injuries from fires and explosions, traffic hazards, and contact with hazardous wastes.

Aesthetic and Nuisance Effects

Annoyance caused by flies, gnats, and other flying pests.
Noise, odors, smoke, and unsightliness associated with the handling of wastes.

Ecological Effects

Disruption of the estuary by filling the shallow reaches, mudflats, and marshes of the Bay.
Disruption of the established botanical and zoological communities by the filling of canyons.

Resource Depletion Effects

Acceleration of resource depletion due to increase in annual waste production and slow progress in resource recovery from solid waste.

SPECIFIC REGIONAL PROBLEMS

An estimated 10 million tons of municipal, industrial, and agricultural wastes needed to be disposed of in the nine bay area counties in 1975.

The location of past and present solid waste disposal sites in close proximity to the Bay-Delta ground and surface waters has resulted in impairment of water quality.

Since most of the existing disposal sites will be completely filled in less than ten years, new disposal sites or disposal methods have to be developed in the near future.

There are no regional solid waste management programs for various types of wastes, especially those for hazardous wastes and residual wastes.

Alternative regional solid waste management systems and their environmental, economic, and social impacts have not been fully evaluated.

There are no stable markets for products of county and subregional source separation and resource recovery systems.

There are no statewide standards covering measuring of wastes and data collection, recording, and reporting.

There is no coordination of reporting requirements of regional and state agencies for landfill site operations.

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Municipal and Industrial	69,700
Agricultural	140,000
	209,700*

Municipal	329,100
Industrial	14,900
Agricultural	775,000
	1,119,000*

Municipal and Industrial	226,300
Agricultural	2,226,500
	2,452,800*

Municipal and Industrial	274,100
Agricultural	273,400
	547,500*

NINE COUNTY TOTAL:	
Municipal and Industrial	5,812,400
Agricultural	4,180,500
	9,992,900*

Municipal and Industrial	1,279,200
Agricultural	2,900
	1,282,100*

Municipal and Industrial	571,200
Agricultural	221,700
	792,900*

Municipal and Industrial	1,083,400
Agricultural	125,000
	1,208,400*

Municipal	751,600
Industrial	94,700
Agricultural	29,000
	875,300*

Municipal	886,100
Industrial	232,100
Agricultural	387,000
	1,505,200*

SOLID WASTE PROBLEMS IN THE SAN FRANCISCO BAY REGION

- PAST AND PRESENT SOLID WASTE DISPOSAL SITES (117)
- SITES WHERE SOLID WASTE DISPOSAL HAS CAUSED WATER QUALITY PROBLEMS (42)
- SITES WHERE HAZARDOUS WASTE DISPOSAL HAS CAUSED WATER QUALITY OR NUISANCE PROBLEMS (4)
- * ESTIMATED TONNAGE REQUIRING DISPOSAL IN 1975

0 10 20 MILES

ASSOCIATION OF BAY AREA GOVERNMENTS

Based on information from the Preliminary county solid waste management plans; the "Solid Waste Management Study, 1968," State Department of Public Health, 1971; and the "Solid Waste Disposal in the San Francisco Bay Region, California," U.S.G.S., 1972.

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